

SUMMING UP THE WORK.

Engineer Hinton Tells What the Senate Irrigation Committee Has Accomplished.

Homes For a Hundred Million People Can be Made in the Arid Region.

Propositions Which the Committee Will Recommend for the Consideration of Congress.

Col. R. J. Hinton, engineer to the senate committee on irrigation, contributes to the Chicago Inter Ocean an interesting summary of the committee's work and a forecast of probable legislation on this all important subject. We give such portions of the article as will have peculiar interest here.

The field session of the senate committee on irrigation and the arid area closed at North Platte, Neb., on the 21st ult. The work of the irrigation survey proper for the present year is also near its termination. Prof. Thompson, chief of that division of the survey, was in Colorado a few days before the committee adjourned, engaged in closing up the work of his field parties. Capt. Dutton, the chief engineer, is at this writing investigating the plans proposed by Col. Lyman Bridges, engineer in charge of the district which includes Nevada and eastern California, for the purpose of utilizing the waters of the great mountain lakes on the slopes of the Sierra in order to secure the reclamation of some 2,500,000 acres in western Nevada. During the present year's work in the irrigation survey about 2,500 square miles has been surveyed by the topographical division alone. The waters of the great river system of the northwest, also that of the Platte, Rio Grande, Green, Wind and other streams within mountain regions, have been gauged and otherwise noted by the hydrological engineers. No work has been done in Arizona, Southern Nevada, Western Colorado, or in the eastern parts of Oregon and Washington. Engineer Wilson, of Montana, has confined his observations and work largely to the valley of the Yellowstone, that of the Upper Missouri and the Judith basin. Engineer Foote in Idaho has had all he could do in his reconnaissance in the great Snake valley regions and the table-lands connected therewith. The work of Engineers Nettleton in the Rocky Mountains and Hamilton Hall in the California division has been one almost wholly of supervision. On the east side of the continental ranges, the abundant waters that supply and make up the Missouri and Mississippi all take their rise and flow through Montana. There is enough water in them to easily reclaim 40,000,000 acres of fertile land, now entirely idle. The stream beds flow from 250 to 500 feet below the surface of the great table lands. There are large valley areas also, but these areas will never prove as good farming land as that of the plains above. Good engineering, however, will be required to so impound the waters of these streams as to enable them to be turned from their beds for the irrigation of the table lands.

In Montana at the present moment only about 650,000 acres are under cultivation by irrigation. Bozeman is the center of the largest irrigated grain section. Missoula, in the extreme northwest portion of the state, promises to be the best orchard and small grain region. Irrigation, however, only exists in Montana in its crudest form, and the farmers who use it have not got over their old school prejudice against the same.

In east Washington the Columbia river valley and its tributaries offer, with skillful engineering, an abundance of water for the reclaiming of at least 12,000,000 acres. A portion of this belongs, like that of the Dakotas, to what the engineers term the soil-humid area; that is, the region in which the rainfall is much larger than in the arid section, but is not quite enough for the security of agriculture. Turning to southwest Arizona, Mexico and the Rio Grande section of Texas, and the conditions of Southern California are reproduced, as to fertility of soil and warmth of climate. At Yuma, on the Colorado river, where the rainfall is but three inches per year, the committee held one of its best sessions. Arriving at sunrise, testimony was taken before breakfast in the open air and sun amid the luxuriant evidences of the rich plant life of the region. The area cultivated is very small, but its results are most prolific. All the fruits of the subtropical region, with cotton, sugar, rice, etc., were shown to the committee. Canal projects are under way which will irrigate some 30,000 acres. This section is regarded as the wildest and widest portion of our national domain, yet it promises to become one of the most fertile and attractive of a friend, and was entirely cured by it. I consider it a never failing remedy for a cough.

Acker's English preparations are for sale in Helena only by R. S. Hale & Co.

When Baby was sick, we gave her Castoria. When she was a Child, she cried for Castoria. When she became a Woman, she clung to Castoria. When she had Children, she gave them Castoria.

Chambers' Colic, Cholera and Diarrhoea Remedy.

This medicine can always be depended upon, not only in the milder forms of summer complaint, but also for malignant dysentery and cholera infantum. The lives of many persons, and especially children, are saved by it each year. It is pleasant, safe and reliable. For sale by H. M. Parthen & Co.

Cough! and Cough! and Cough!!! What in the world is the reason you will cough and keep coughing and still keep trying inferior medicines when Bege's Cherry Cough Syrup will positively relieve your cough at once? This is no advertising scheme, but an actual fact and we guarantee it. For sale by all druggists. R. S. Hale & Co., wholesale and retail agents.

Bucklen's Arnica Salve.

The sites of all the great storage basins that they may be selected by the engineers of the irrigating survey.

2. That the area of the future home-lands to be granted settlers within the arid region should be reduced probably to forty acres each; the difference between that amount and the 160 acres granted elsewhere to be made up in privileges that can be held in the use of the pastoral and timber lands. It is also probable that an actual minimum of cultivation will be required as well as residence in order to secure homestead title.

3. The committee will doubtless report that all the evidence that has been taken shows that the equities of the situation require for the security of the present and future of the irrigating regions that the general government shall in every proper way favor and sustain the policy of indisputably linking the water with the land. So that those who occupy and till the arid soil may also own and control the water that makes it fertile.

The committee will without doubt propose some legislation in regard to the preservation of the timber within the regions west of the ninety-eighth meridian. The drift of their proposition in this regard will certainly be against the employment of secret agents. It will endeavor to offer legislation that will place the duty of protection on those who are to be benefited by the preservation of the timber, under the supervision, of course, of the government itself.

A large appropriation will be asked to push forward the work of the new irrigation survey. With the information it will afford, congress may not legislate wisely, nor can private capital or co-operative enterprise be justified in entering on the work of land reclamation upon the large plane which that work will require.

COREA AND THE CHINESE.

No Ill Feeling Between These Countries, Says Dr. Allen.

WASHINGTON, Oct. 9.—Dr. Allen, foreign secretary to the Korean embassy, is expected to start on a business trip to Corea in regard to matters for the legation. He will stop in Ohio a few days to see his family, and will then proceed to San Francisco, taking the first steamer to Hong Kong. In conversation about the relations existing between the Korean and Chinese legations here, and the rumors that the United States proposed sending an envoy to investigate the situation as to the exact relations of the two countries, he says: "I wish they would, and then set at rest all these idle rumors; but if there is such a step contemplated, we have no intimation from the state department to that effect. We certainly would be consulted in regard to the matter. The only mention I have heard of it was from Admiral Shufeldt, who, it is intimated, is to be sent on a delicate mission, which is rather suggestive. The retired Chinese minister was on the very best of terms with our legation, and there has not been any mention lately of any objection to Corea having a representative there. As to the new minister and Prince Pak, there is the most cordial friendship existing between them, even more than there was with his predecessor. I think all the present discussion springs from the meddlesome activity of a citizen of the United States in the employ of the Korean government. They are just about finding him out, and will no doubt soon dispense with his peculiar service."

It is astonishing how rapidly the feeble and debilitated gain strength and vigor when taking Ayer's Sarsaparilla. For what are called "broken-down constitutions," nothing else has proved so effective as this powerful and perfectly safe medicine.

Races at Spokane Falls.

For the races at Spokane Falls, Oct. 8th to 12th, inclusive, the Northern Pacific railroad will make a rate of one and one-fifth fare (\$22.55) for the round trip, Helena to Spokane and return. Tickets on sale Oct. 7th to 11th, inclusive. Tickets to return up to and including Oct. 12th. A. B. Knapp, General Agent, Helena, Mont.

Cure for Piles.

Itching piles are known by moisture like perspiration, producing a very disagreeable itching after getting warm. This form, as well as blind, bleeding and protruding piles, yield at once to the application of Dr. Bosanko's Pile Remedy, which acts directly upon the parts affected, absorbing the tumors, allaying the intense itching and effecting a permanent cure. Fifty cents. Address The Dr. Bosanko Medicine company, Piquette, Ohio. Sold by R. S. Hale & Co.

Home Testimony.

HELENA, Oct. 7, 1887.

I was suffering from an unusually bad cough, my lungs were sore and congested, and I consulted one of the best physicians in Helena, whose prescriptions failed to relieve me. I became alarmed, and at the suggestion of a friend purchased a bottle of Aker's English Remedy for coughs, and after taking it according to directions was completely cured. I therefore cheerfully recommend it.

JACOB SWITZER. I had a hacking cough and inflamed throat and bought a bottle of Aker's English Remedy upon the recommendation of a friend, and was entirely cured by it. I consider it a never failing remedy for a cough.

J. FELDMAN. Acker's English preparations are for sale in Helena only by R. S. Hale & Co.

When Baby was sick, we gave her Castoria. When she was a Child, she cried for Castoria. When she became a Woman, she clung to Castoria. When she had Children, she gave them Castoria.

Chambers' Colic, Cholera and Diarrhoea Remedy.

This medicine can always be depended upon, not only in the milder forms of summer complaint, but also for malignant dysentery and cholera infantum. The lives of many persons, and especially children, are saved by it each year. It is pleasant, safe and reliable. For sale by H. M. Parthen & Co.

Cough! and Cough! and Cough!!! What in the world is the reason you will cough and keep coughing and still keep trying inferior medicines when Bege's Cherry Cough Syrup will positively relieve your cough at once? This is no advertising scheme, but an actual fact and we guarantee it. For sale by all druggists. R. S. Hale & Co., wholesale and retail agents.

Bucklen's Arnica Salve.

The best salve in the world for cuts, bruises, sores, ulcers, salt rheum, fever sores, tetter, chapped hands, chilblains, corns, and all skin eruptions, and positively cures piles, or no pay required. It is guaranteed to give perfect satisfaction, or money refunded. Price 25 cents per box. For sale by R. S. Hale & Co.

Gold and Silver, \$1.50 Zinc, \$1.00 Silver, gold and lead 2.00 Tin, \$1.00 Lead, \$1.00 Antimony, \$1.00 Copper, \$1.50 Arsenic, \$1.00 Sulfur, \$1.50 Iron, \$1.00

HELENA, MONTANA.

HELENA, MONTANA.

THE NEW YORK DRY GOODS STORE

FOR FALL AND WINTER.

Rare Attractions! Fine Imported Wraps! New and Artistic Forms!

Surmises as to what is correct for Fall and Winter wear can easily be turned into certainties by an inspection of our Cloak and Suit Department. The tide of Fashion is unmistakably in favor of our Stylish Cloth Wraps, Quaint Newmarkets and Redingotes. The Fashion Agent of the Louvre mentions that the Styles are taken from the Egyptians, to the designs of the first Napoleonic empire and directory, to the time of a century ago, when these odd combinations were so much in vogue. The garments are charmingly trimmed with Oriental Gimp, the patterns being derived from cloth designs worn by the Persians and Egyptians. Ladies, we have no two of these garments of the same Color or style. We are the sole possessors, the agency being given us by the importers. Ours is the only stock that meets the demands and requirements of this educated and fashionable city. We have never stooped to notice the bombast of any competitor, and will only say as we are not given to personalities, that they can purchase their Newmarket from us at more reasonable rates, also that they will be more in accordance with the wants of society and give them a standing when once known they are a protege of the New York Dry Goods Store.

PLUSH NEWMARKETS!

CLOTH NEWMARKETS!

NEWMARKETS!	\$30	PARISIAN WRAPS	\$75	CLOTH GARMENTS!
Elegance of Shape, Perfection of Fit and Finish.	\$40		\$100	Very Fine, for Ladies and Children.
	\$50		\$150	

We suggest to the Ladies of Helena to make their selections now. Also to parties living at a distance to send in early orders, if unable to visit us, as there will be no duplicate of the above garments.

TEA GOWNS AND READY MADE DRESSES!

At no time in the history of Helena has there been such a display in any one store of Tea Gowns, Wrappers and Dresses as we exhibit this season. Beautiful in fit, charmingly draped. Tea Gowns of Silk, Satin and Worsted, sufficient to enchant the most vivid imagination. Dresses suitable for the altar, the stage, the parlor, or a charming costume for street wear. Agents for Foster's Celebrated Lace Kid Gloves.

ALL GOODS SOLD AT NEW YORK PRICES.

Out of Town orders Promptly Filled. Satisfaction Guaranteed.

NEW YORK DRY GOODS STORE. Corner Main and Bridge Sts., Helena.

BUTTE CITY, Montana.

\$3,500 buys a ledge of hematite iron, fluxing, lime stone and water right, three quarters of a mile from railroad. \$8,500 buys 440 acres of fenced land, and all appurtenances for sheep growing business, with right of the eldest and best range in Montana, twenty-five by sixteen miles in extent. Also, if wanted, 3,500 hogs of sheep at \$2.50 will go with the range. Wood, water, grass and shelter plentiful.

\$1,100 buys an undivided four-sixths interest in 320 acres of coal land by a railroad near Butte, containing three distinct veins of good coal, respectively 2 feet, 4 feet and 12 feet in thickness.

Also, fine building propositions in the business center of Butte.

For sale by EVANS, NICHOLS & CO., Real Estate & Mining Brokers. 62 EAST BROADWAY, BUTTE, M. T.

OGDEN Military Academy.

A high grade school, preparing boys for college, scientific school and for business. First-class education; thorough course of study. Address Superintendent, Ogden City, Utah.

UTAH ASSAY OFFICE—AND—CHEMICAL LABORATORY, J. T. GOVE,

HELENA, MONTANA.

HELENA, MONTANA.

HELENA, MONTANA.

HELENA, MONTANA.

A. H. NELSON, Land and Mining Atty.

Seven Years Experience in the General Land Office at Washington, D. C. ROOM 8, ATLAS BUILDING. Main Street, Helena, Montana.

DANIEL HANLEY & CO., Exclusive Jobbers in

Oranges, Lemons and Apples, FOREIGN AND DOMESTIC

Dried Fruits and Nuts, Cigars and Tobaccos.

SPECIALTIES—Crescent Creamery Butter, Eggs, Cheese, Vegetables and Montana Packing House Products.

A. K. PRESCOTT DEALER IN MARBLE AND Granite.

IRON FENCING HELENA, MONT.

MONTANA Business College & Photographic Institute

The only First-Class Business School between St. Paul and Portland. Night school October to April. Read "Board of Reference" in College Reporter. Write for terms.

HAHN & WALTERS, Gold Block, Helena, Mont.

HELENA, MONTANA.

HELENA, MONTANA.

Merchants Hotel,

Corner Broadway and Warren Streets, Opposite U. S. Assay Office. HELENA, MONTANA. THOS. O'BRIEN & SON, Props.

Nearly fitted and newly furnished throughout. Ladies' and gents' bath, barber shop, bar and billiard hall, with all modern improvements.

SAMPLE ROOMS With special accommodations for Commercial Travelers. BUS RUNS TO AND FROM ALL TRAINS.

BEST QUALITY Water White Coal Oil

At 25c. a Gallon.

For Sale by the Following Dealers:

R. C. WALLACE W. H. GUTHRIE & CO., KUPHAL & LEOPOLD, CHAS. LEHMAN.

A History of Our Heroes, Our Statesmen, Our Scholars, Our Men of Note in Every Field.

APPLETON'S CYCLOPEDIA OF American Biography,

The Only National Standard.

"Appleton's Cyclopaedia of American Biography" contains a Biographical sketch of every person eminent in American civil and military history, in law and politics, in divinity, literature and art, in science and in invention, including distinguished persons born abroad that are related to our national history, and embraces all the countries of North and South America. It is a complete history of the New World in every branch of human achievement.

HELENA, MONTANA.

HELENA, MONTANA.

HELENA, MONTANA.

WENDEL & STEIN'S San Francisco Bakery.

Formerly M. Reing's. First-Class Quality of

Bread, Pies and Cakes Promptly Delivered

To any part of the city on short notice. No. 106 Bridge street, one door above M. Reing's. Branch Store at Cor. Sixth Avenue and Park.

JAMES TWIFORD, MANUFACTURER OF

Wagon Sheets, Tents, Awnings and Hydraulic Hose.

Twenty different styles of Window Awnings and the latest improved fixtures for hanging. Canvases of all kinds and widths from 20 inches wide to 120 inch wide always in stock. The latest improved Camp Goods. MAIN STREET, HELENA.

PAUL S. A. BICKEL, UNITED STATES DEPUTY

Mineral Surveyor,

1191-2 N. MAIN.

J. L. SMITH, Freight Transfer Line,

HELENA, MONTANA.

HELENA, MONTANA.

HELENA, MONTANA.

HELENA, MONTANA.